

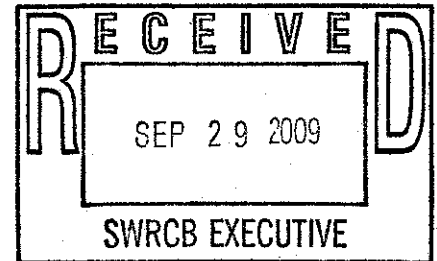


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September 29, 2009

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814



Subject: Comment Letter – OTC Policy

Dear Ms. Townsend:

We welcome this opportunity to submit these comments on the Draft Substitute Environmental Document for the Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling. We concur with statement of goals in Section 1.7. They represent a significant step to reduce current dependence on “best professional judgment” to implement the 316(b) requirements. The following are specific comments related to the implementation of the goals.

Section 2.0 Background

2.2 Biological and Cumulative Impacts from Once Through Cooling

The focus of the biological and cumulative impacts caused by once through cooling has been on impingement and entrainment of fish and fish larvae and loss of the commercial value of the fish. Impingement and entrainment studies¹ have not addressed the impacts on the aquatic life from an ecosystems based view point. Very little has been done to quantify the by direct monitoring the entrainment of the benthic organisms, the organisms that are at the bottom of the food web. These organisms besides being the source of food also provide other important biological services such as scavenging detritus. It should be pointed out that the SWRCB Sediment Quality Objectives Part 1² for Enclosed Bays and Estuaries was recently approved by EPA. It is based on multiple lines of evidence; toxicity, chemistry, benthic community. Of particular interest is the line of evidence for the benthic community, which include three new benthic indices that were developed for Part 1. We recommend that these new benthic indices be evaluated for monitoring and assessing the impact of OTC power plants located in enclosed bays and estuaries. The best technology available should also apply to monitoring technology.

3.0. Issues and Alternatives

3.1. Adoption of a Statewide Policy Concur with Staff recommendation Alternative 3: adopt a statewide policy to provide statewide consistency in implementing §316(b).

¹ For example, Duke Energy South Bay Power Plant SBPP Cooling Water System Effects on San Diego Bay; Vol. 1 (316(a) and Vol. II (316(b) August 2004

² SWRCB Sediment Quality Objectives http://www.swrcb.ca.gov/water_issues/programs/bptcp/sediment.shtml

3.4 Alternative Requirements for low capacity utilization facilities. Concur with Staff Alternative 2: Make no distinction based on capacity utilization.

3.6. BTA for Existing Power Plants We disagree that wet cooling is the BTA for Alternative 1; instead it should dry-cooling. Dry cooling reduces impingement and entrainment losses to zero.

3.8 Baseline Monitoring. We support Alternative 2. Staff argument for Alternative 3, which eliminates monitoring for Track 1 while not needed for compliance, will provide the baseline data needed for comparing the pre Track 1 to post Track one changes in the aquatic ecosystem. This section does not clearly define the monitoring requirements. Monitoring only the larvae in the water column and not the benthic community is not adequate to assess the aquatic ecosystem.

3.9 Monitoring requirements. The alternatives presented are based on Track I using wet cooling at the BTA. Impingement and entrainment is reduced based on the flow reduction of the water body of concern. On the other hand if the cooling water is recycled water then the flow reduction would be 100%; likewise, if Track 1 requires dry cooling.

3.10. Makeup Water Source. We agree with Staff Alternative 2: require that power plant owners consider the feasibility of using recycled wastewater for power plant cooling, either to supplement OTC or as makeup water in a closed-cycle system, when developing their implementation plans.

3.11 Compliance Schedule. We agree with the Staff Alternative 3 used to establish the compliance schedule. However, we do have a major concern about the South Bay Power Plant. The Implementation Schedule shown on Table 15 has the South Bay Power Plant listed December 13, 2012 to be in compliance with a repowered, dry-cooled power plant. The existing power plant is located at the extreme end of San Diego Bay with cooling water intake and discharge located in the Bay. Unit 1 came on line I in 1960. The water depth is very shallow, 1 to 4 meters. The low tidal exchange takes 30 or more days to flush the waters in South Bay. These conditions and along with the solar thermal loads can cause the water temperature to exceed 100 degrees Fahrenheit in the late summer months and the water to become hypersaline. The volume of the daily cooling water for this plant is a significant fraction of the source water volume, unlike a coastal power plant that draws in offshore waters with the source water much greater than the daily cooling water demand. Figure 13 of the SED shows the seasonal variation of larval fish abundance. The maximum occurs in the summer months when the power demand and cooling flow rate is the highest. The South Bay power plant data impingent and entrainment losses are the highest during this period. The cumulative environmental damage, thermal, impingement and entrainment for caused by the power plant for almost 50 years cannot be accurately assessed compared to the unknown preexisting conditions, especially the biodiversity of the aquatic life. The Duke 316(a) report³ that the benthic infauna tax in the discharge are less in abundance and lower frequency of occurrence compared to the stations away from the discharge channel. It is only within the past decade that environmental monitoring has revealed the unacceptable damage to the South Bay aquatic life, including the loss of eel grass, benthic infauna, shellfish, local and pelagic fish.

There has been a strong community opposition to this power plant and effort to have it decommissioned. The City of Chula Vista has long sought to have the power plant removed and the property incorporated in their community redevelopment plans. The San Diego Regional Water Quality Control Board at their regularly scheduled meeting on September 9 this year heard testimony from elected officials, the public

³ Loc cit , page ES-13

and environmental groups expressing the need to have this plant retired at the earliest date⁴. The combined cycle power plant in Otay Mesa will be coming on line shortly and eliminates the need for the repowered South Bay Power Plant. We recommend that the Policy retire the existing South Bay Power Plant at the earliest date.

3.12 Proposed Policy to Include Interim Requirements. We support Staff Alternative 4: establishing interim IM/E requirements using technology-based methods) and requiring interim restoration.

3.13 Proposed Policy to Include Wholly Disproportionate Cost-Benefit Test

We support Alternative 1; Exclude Wholly Disproportionate Cost-Benefit Test. Adding this cost-benefit test will delay the efforts to implement closed cycle cooling

Thank you for this opportunity to provide these comments on the Draft Substitute Environmental Document for the Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling.

Sincerely,



Edward Kimura
Chair, Water Committee
Sierra Club, San Diego Chapter

⁴ Lee, Mike, Disputed South Bay Power Plant could lose permit Sept 10, 2009, San Diego Union Tribune <http://www3.signonsandiego.com/stories/2009/sep/10/disputed-south-bay-power-plant-could-lose-permit>